The History of the Brookville Environmental Education Center

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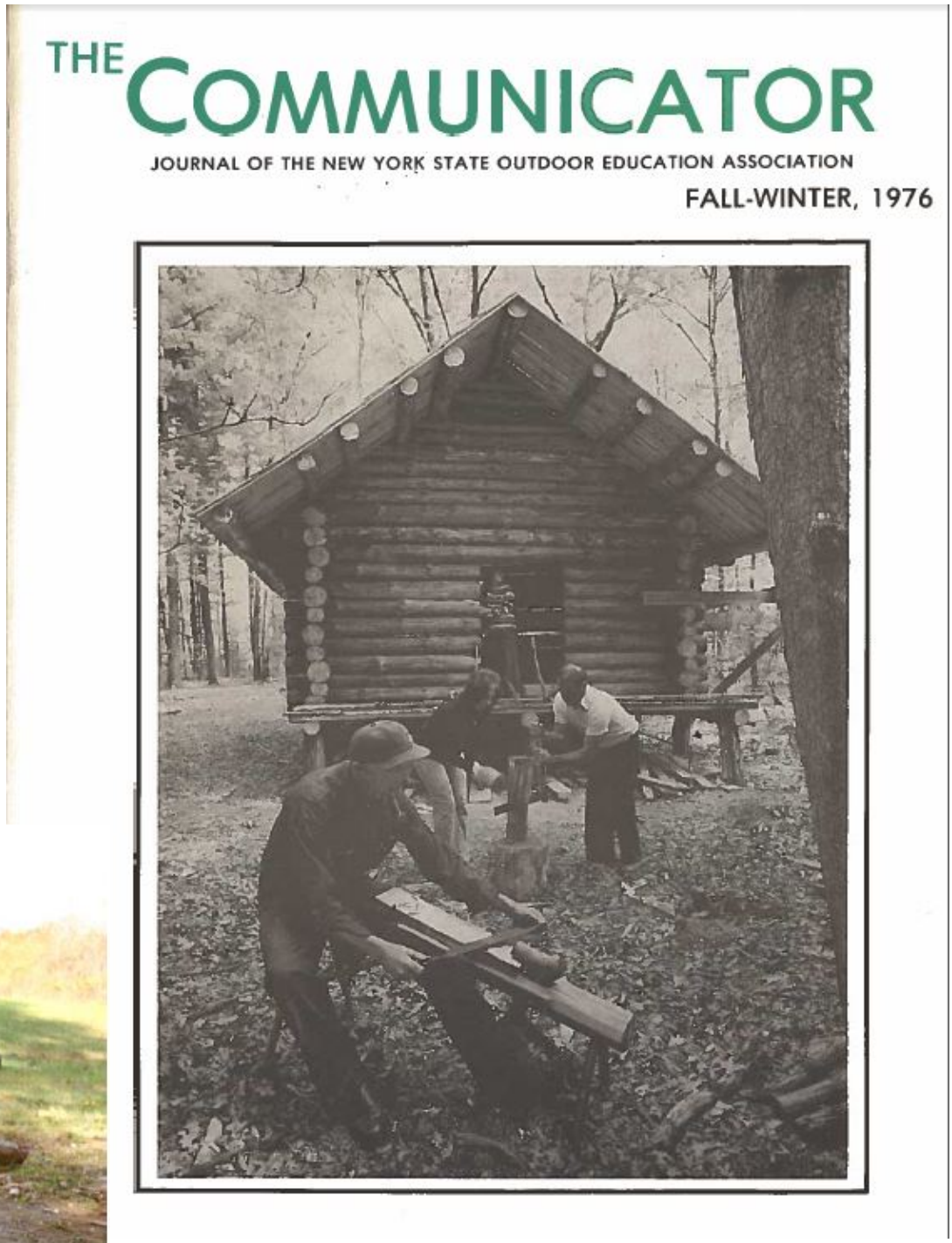
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The Brookville Log Cabin was built almost 40 years ago…

And kids today are still learning about colonial times!

Growing Pumpkins Where Missiles Grew

by DR. JOHN LORET
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The missile crop at Brookville in 1960

A STEP FORWARD INTO THE PAST: FROM MISSILES . . . . . TO . . . .

There is a new log cabin on the old Nike missile base!

In an ususual reversal of the current rapid advancement of modern technology, a dedicated and resourceful group of college faculty and students, local citizens, public school children, and handicapped youngsters have transformed a former Nike-Ajax missile base into a living historical homestead environmental center, resembling the kind of village that existed on Long Island around the year 1800.

The site is located on an abandoned 38 acre missile launching base in Old Brookville in the town of Oyster Bay, Long Island. The land was given by the federal government to Oyster Bay and the Nassau Board of Cooperative Education Services (BOCES) for educational and recreational use. I was appointed project director by the town and BOCES, representing Queens College and the Professional Educators Network (PEN), a non-profit educational corporation. Our purposes have been to build a homestead environmental center, and develop materials using homestead and pioneer skills that could be used for education and recreation programs for the schools and the total community population.

Student visitor watches Nike being raised

Newsday Photos by Dick Kraus

Program Objectives

The curriculum developed for this program is concerned with the past, present, and future use of the total environment. The program is designed to:

1. develop an awareness of the feelings of early settlers for freedom, independence, and individualism, in keeping with their traditions and ways of life.
2. learn methods and skills of past community life in order to understand some of the difficulties under which many of the world's people still live.
3. give people the opportunity to consider and develop theoretical and practical concepts through "hands-on" experiences.
4. familiarize participants with the methods and tools used by early American pioneers and settlers.
5. attempt, as far as possible through research, to develop and experience a life style characteristic of earlier inhabitants.

Getting Started

In March 1975 staff and students of Queens College, C.U.N.Y. conducted a land survey of the area. Plant populations were inventoried, soil analyses made, and other environmental factors noted in order to assess ideal locations for buildings, animal shelters, gardens, and to determine how the various land areas could best be utilized.

At the start, the site consisted of empty fields, a five acre cement launching pad, large earth bunkers, vandalized and hazardous barrack buildings, and several acres of wooded land. There was no water or services of any kind. We were true homesteaders! Our only resources were plenty of student and citizen volunteer labor with a strong willingness to learn.

Log Cabin

A log cabin not only reflects the materials, tools, and way of life of the builders of the past, but it also has a genuine architectural beauty. Modern society is so far removed in its thoughts and surroundings from earlier generations of Americans that it is easy to overlook the reality and significance of the log cabin as a home. Building such a log structure can be an excellent way to retain some of our living traditions. We therefore selected the construction of a one room log cabin as our first project, using only simple hand tools.

Logs were obtained from the Ward Pound Ridge Park in Westchester County. We cut, loaded, and unloaded over 70 trees by hand and transported them on a flat bed truck on loan to us from BOCES. Some of the logs weighed over 400 pounds. After the logs were taken to the homestead site, they were cut to size and de-barked by hand.

Students researched various building methods for the ideas for the constuction and Mr. Everett Chandler, a local resident and former Maine logger and woodsman, volunteered to teach the participants the use of logging and hand tools. Some of these included the pevey, axe, broad axe, adze, slick, draw knife, hand auger, log dogs, and shaving horse. Many of these tools became obsolete in this country about a century ago. Logs were lifted by hand into place, smoothed, notched in the corners, and fastened together with wooden pins called trunnels. Roof shingles were made by splitting oak logs with a froe and maul. According to Zilia Estrada, a student who helped to build the log cabin, "When I first heard about the homestead, I though, 'Building a log cabin - how romantic!' But now, I've found out what it really entails - what skills are necessary, and how much work is actually required. The insights and skills I've gotten by working on this project I couldn't get in a library or a regular classroom."

The Blacksmith Shop

Instead of the towering Nike-Ajax missiles which were removed in 1974, there stands a blacksmith's shed with walls constructed of floor boards taken from the base's dismantled barracks.

Blacksmithing was not only essential to the early development of our own country, but was also important to the building of civilization. Today there are few people who know much about the smithy or his work. Prior to this century, the blacksmith was an important person in every homestead community.

To construct our center blacksmith shop, we demolished two of the hazardous barrack buildings and reused the beams, nails, and roof materials. A forge, blower, anvil, and other blacksmith tools were donated. Recycling materials thus became an improtant goal of our center. Student blacksmiths now use the blacksmith shop to make nails, hinges, handles, and latches for the log cabin and other homestead projects. Groups visiting the shop learn various methods and procedures for working with iron and both youngsters and adults are encouraged to try some of the blacksmith skills under close supervision.

Photographs by Joseph Seccente

Student Randy Pretto, who is interested in blacksmithing, said he now understood what a big job survival was for a homesteader, "It takes me several minutes just to make one nail. Think how long it must have taken for people to do all their metal work by hand."

Fence Building

Fences were very important to early settlers to contain livestock and to mark property lines. Fences were also used as a form of measurement—six rails to a chain length which is approximately 66 feet. At our Center the art of fence-building was demonstrated by researching and constructing an animal corral using fence construction methods from three different periods in our colonial history. These included the Virginia snake fence, the post and rail fence, and the double post pin and rail fence. Rails for our fence construction have been hand split from logs.

Cooking

When the American frontier was still in view of coastal tidal waters and later when the West was first settled, life was simple, conveniences few, and many activities were conducted outdoors. This, of course, included much of the cooking. At the Center, we have developed a program in pioneer cooking and baking.

Near the log cabin is an open cooking pit. The kitchen is a clearing in the wood lot with a fire pit, wood chopping blocks, log seats, and lashed tables. Classes come here to learn the

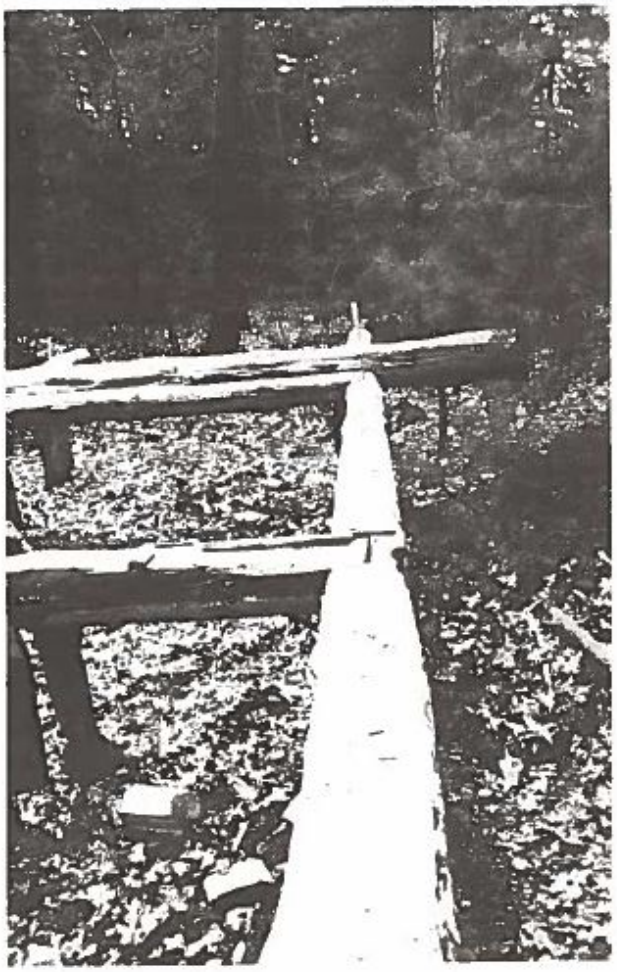
cooking methods of the early settlers: roasting young suckling pigs and chickens over an open fire; smoking meats, cooking soups and stews in a large iron caldrom suspended from a lashed tripod; and baking breads and pies in iron Dutch ovens with hot hardwood coals. When classes are involved in such activity smoke curls above the oak woods and delicious aromas permeate the area. Instruction is given in the selection of the appropriate cooking and smoking woods and in basic woodshed skills for cutting and splitting firewood.

After making cornbread on the open fire, one 12 year old student exclaimed, "Now I know how hard they worked and realize how easy it is now!"

Livestock

In our urbanized society we keep animals mostly as pets. For the homesteader however, animals were essential for survival and economy. Animals provided:

1. food - in terms of meat, eggs, milk and its products, such as butter, cheese, and cream.
2. bedding - down from chickens, ducks, and geese.
3. clothing - from hides, pelts, and shearing animals.
4. income - from selling or trading animals or their products.
5. fertilizers - using animal manure for the garden.
6. other - making soap, candles, raw hide for lashing, etc.



Photographs by Joseph Sceccnte

Animals donated to the homestead include goats, chickens, ducks, and rabbits. Participants in the animal care program learn that keeping healthy animals requires hard work, time, and constant attention. Butchering, curing, and preserving methods are also included in the program.

Homestead Vegetable Garden

Although soil tests taken earlier indicated poor soil quality, some corn, beans, squash, pumpkins, beets, radishes, and lettuce were planted during the first year as an experiment. Old fashioned cultivators were used to loosen the dirt for hand-planting. Attention was given to a program of soil improvement using organic methods. These included:

1. Soil preparation: a) mulching; b) composting; c) spading
2. garden planning
3. use of simple farm tools
4. weed control methods
5. insect and pest control methods
6. hot bed and cold frame methods, transplanting seedlings and thinning.

Wood Lot Management

For a homesteader, the management of a wood lot was as much a part of self-sufficient living as is organic gardening and livestock management. The woodlot provided such basic needs as firewood, fence posts and rails, lumber, maple sugar, wild foods, and game. In several ways a wood lot is similar to a garden. The same practices of thinning, weeding, and harvesting are common to both.

Newsday Photos by William Senft, Jr.

In our woodland management program, we emphasize:

1. The use of indigenous trees for firewood, smoking, heavy construction, and furniture
2. methods for estimating wood volumes
3. methods for measuring: a) standing trees; b) felled trees; c) culls
4. wood lot cruising methods: a) tally system; b) expansion factors
5. energy flow, productivity, and allowable cut

There is a vast amount of untapped energy in the forest and productivity can be enhanced by using sound management practices. In our wood lot management program, we hope to foster a rational attitude toward the forest as a continuing, renewable resource for our own use and for use by future generations.

Homesteaders Trail

A unique educational tool was developed in the form of a trail by Mr. Frank Knight, an unusually fine naturalist. The trail, which he calls "The Bramble Ramble", is a zig-zag path leading through wooded shrub and open field areas. Unlike most conventional interpretive trails where specific species are identified and classified, "The Bramble Ramble" depicts indigenous plants and trees that a homesteader would use for lumber products, food, crafts, medicine, cooking herbs, and dye stuffs. On the trail you can touch, smell, and even taste some of the necessities and many of the luxuries that early homesteaders gathered and used on Long Island, such as the bayberries that were used for highly prized scented candles.

A Program For The Handicapped

Last spring and summer, the Town of Oyster Bay conducted a homestead work program for handicapped youngsters as part of the town's recreation program. Over 300 handicapped youngsters were involved in digging, planting, sawing and chinking the log cabin, blacksmithing, and other activities at the homestead site. Support for the program came from the Special Services Department of the town along with grants from the America the Beautiful Fund and The Explorers Club to train volunteer leaders to work with the handicapped in homesteading skills.

Homestead Of The Future

Plans to develop a homestead of tomorrow are underway. Featured will be programs concerned with generating power

with solar energy, wind, water, and bio-gas. The construction of a solar-heated greenhouse is presently being directed by a graduate student under a grant provided by the America the Beautiful Fund. Many of the materials for this project have also been salvaged and re-used from the demolition of the old Nike base buildings. The solar greenhouse is an experiemental project that will provide information for future buildings and will define how solar energy can supplement conventional energy sources and thereby help alleviate energy shortages.

The Homestead Environmental Center is designed to develop an appreciation of and respect for the environment in which we live. However, the full import of the program is to provide educational and recreational experiences for community participants through direct, "hands-on" experiences and the program is adapted for all groups in the community: senior citizens, physically and mentally impaired people, family groups, college students, teachers, and school children. Curriculum materials for class use are being prepared by the Professional Educators Network (PEN) and will soon be ready for distribution.

The uniqueness of this project is due, in part, to the fact that all of the work had been completed by volunteers, both novices and professionals, young and old, the gifted and the handicapped—all participated. Perhaps this program can serve as a model for others in offering a community service.

Students and others have had the opportunity of "living" the resourceful life of early America through direct, first-hand outdoor experiences . . . smelling the spicy odor of bayberries being prepared for candlemaking and the drifting aromas of roasting chickens and baking pies over a hardwood pit fire . . . or hearing the sound of shingles being shaved to shape, metal being forged into usable nails, and the scraping sound of old-fashioned cultivators loosening the dirt for hand-planting of pumpkin seeds and potatoes.

By converting the old missile site into an active historical homestead environmental center, the many participants have developed a unique outdoor facility while taking an unusual step forward into the past!

Newsday Photos by William Senft, Jr.